



DEPARTMENT OF THE ARMY

FORT DETRICK

FREDERICK, MARYLAND 21701

IN REPLY REFER TO:

SMUFD-TD

21 May 1968

Professor Joshua Lederberg  
Department of Genetics  
Stanford University School of Medicine  
Palo Alto, California 94304

Dear Josh:

Thank you for your prompt and generous letter of 8 May.

Under separate cover, I am forwarding a number of our publications selected to be responsive to the interest you have expressed.

One envelope is labeled ANCIENT HISTORY. It contains reprints of scientific papers from our laboratories in the years 1946 to 1952 on: the generation of airborne particles during bacteriological plating operations, potential infectious hazards of common bacteriological techniques, and medical investigations of laboratory-acquired infections among workers conducting research with anthrax, glanders, and brucellosis. The common features of these publications are their reflection of our active concern, beginning with the establishment of our laboratories, with the hazards involved in microbiological research and our candid reporting of laboratory-acquired infections so that the lessons learned from these situations could benefit the entire scientific community.

A second envelope is labeled RECENT HISTORY. This contains reprints of scientific papers from our laboratories on: the emergency disinfection of an operating room and patient ward with beta-propiolactone, microbiological evaluation of incinerators, sampling of submicron-sized aerosols, and the hazard to bearded men of working in a microbiological laboratory (this latter topic should be a timely one in modern university circles).

A third envelope is labeled MEDICAL STUDIES OF LABORATORY-ACQUIRED INFECTIONS. It contains reprints of scientific publications from the Department of Medicine, The Johns Hopkins University, which were supported by a contract from Fort Detrick. At our initiative, this outstanding medical

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investigative group, headed by Leighton E. Cluff, has made a thorough and independent analysis of a variety of medical questions related to Fort Detrick's activities. Selected as examples of their many publications for inclusion here are their studies on intensive immunization of man and their analyses of laboratory-acquired brucellosis, coccidioidomycosis, tularemia, and Q fever.\*

A fourth envelope is labeled REVIEW PAPERS ON MICROBIOLOGICAL HAZARDS. It contains copies of publications from our laboratories on: microbiological safety in U.S. and foreign laboratories, causal factors in microbiological laboratory accidents, laboratory-acquired mycoses, sampling microbiological aerosols, etc.

A fifth envelope is labeled DESIGN CRITERIA. This contains a two-volume publication entitled, "Design Criteria for Microbiological Facilities" in which Fort Detrick has collected the results of many years of consideration and action in this field of endeavor. This publication, and engineering consultation on this subject, has been made available to a wide variety of requestors interested in building hospitals, pharmaceutical research laboratories, medical schools, and the Lunar Receiving Laboratory of NASA.

Working at Fort Detrick is a far less hazardous occupation than most other choices. Enclosed with this letter is a tabulation of disabling injuries, including hospitalized laboratory-acquired illnesses, for employees of Fort Detrick as compared with those in other industries or with the Federal Civil Service as a whole. All calculations are on a comparable basis.

I hope that this documentation will be useful to you. I have made no comments on the conduct of field trials with hazardous agents since I have no responsibility for such activities. With regard to my earlier letter, dated 3 May, and the present one, you may use the information therein but I would prefer that you not attribute it to me. The scientific publications, of course, may be quoted in the customary fashion.

Sincerely yours,



RILEY D. HOUSEWRIGHT  
Technical Director

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\* This is the contract that Elinor Langer called "a million dollar secret" that resulted in no publications. (Science, 155, 178, 1967)

DISABLING INJURIES OF ALL KINDS, INCLUDING HOSPITALIZED LABORATORY-  
ACQUIRED ILLNESSES, PER MILLION MAN-HOURS WORKED, UNITED STATES

	<u>Rate</u>
Fort Detrick Civilian Employees, Fiscal Years 1964, 1965, 1966 . . . . .	0.49
Communications Industry (lowest) 1964 . . . . .	1.20 *
Automobile Industry, 1964 . . . . .	1.86
Chemical Industry, 1964 . . . . .	3.13
All-industry Average, 1964 . . . . .	6.45
<u>Federal Civilian Employees, 1963 . . . . .</u>	<u>7.94</u>
(The rate for 1964 is now known to be 7.3)	
(The rate for 1965 is now known to be 7.3)	
Printing and Publishing, 1964 . . . . .	9.35
Lumber Industry, 1964 . . . . .	17.26
Air Transport Industry, 1964 . . . . .	18.77
Mining, Underground Coal, 1964 (highest) . . . . .	37.78

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\* All data, other than that of Fort Detrick, taken from ACCIDENT FACTS, 1965 Edition, National Safety Council, 425 North Michigan Avenue, Chicago, Illinois 60611.